

Amendments to th Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A gate driving circuit, comprising:

a voltage source and a current source which drive a control electrode of a voltage-driven type switching element;

a voltage source controller configured to create a voltage drive signal which controls the voltage source using a control signal given from the outside;

a delay control signal creation unit configured to create a delay control signal having a certain delay time with respect to the control signal;

a reference signal creation unit configured to create a voltage reference signal by waveform shaping of the delay control signal;

a voltage detector configured to detect a voltage between main electrodes of the voltage-driven type switching element and output a principal voltage detection signal; and

a comparator configured to compare the principal voltage detection signal with the voltage reference signal and output a comparison result signal which controls the current source.

2. (Original) A gate driving circuit, comprising:

a voltage source and a current source which drive a control electrode of a voltage-driven type switching element;

a voltage source controller configured to create a voltage drive signal which controls the voltage source using a control signal given from the outside;

a delay control signal creation unit configured to create a delay control signal having a certain delay time with respect to the control signal;

a reference signal creation unit configured to create a voltage reference signal by waveform shaping of the delay control signal;

a voltage detector configured to detect a voltage between main electrodes of the voltage-driven type switching element and output a principal voltage detection signal;

a comparator configured to compare the principal voltage detection signal with the voltage reference signal and output a comparison result signal which controls the current source;

a transition period detector configured to detect a switching transition period by using the control signal; and

a selective signal pass-through unit for allowing the comparison result signal to pass through only in the switching transition period and attenuating the comparison result signal in a steady period, the selective signal pass-through unit being connected to a next stage of the comparator.

3. **(Currently amended)** The gate driving circuit of claim 1 ~~or~~ 2, wherein an output terminal of the voltage source is connected to the control electrode of the voltage-driven type switching element through a resistor, and an output terminal of the current source is connected to the control electrode of the voltage-driven type switching element.

4. **(Original)** The gate driving circuit of claim 3, wherein, in the delay control signal creation unit, the delay time of the delay control signal is variably set in accordance with a value of the resistor.

5. **(Currently amended)** The gate driving circuit of claim 1 ~~or~~ 2, wherein, in the reference signal creation unit, a second order low-pass filter is used.

6. **(New)** The gate driving circuit of claim 2, wherein an output terminal of the voltage source is connected to the control electrode of the voltage-driven type switching element through a resistor, and an output terminal of the current source is connected to the control electrode of the voltage-driven type switching element.

7. **(New)** The gate driving circuit of claim 2, wherein, in the reference signal creation unit, a second order low-pass filter is used.

8. **(New)** The gate driving circuit of claim 6, wherein, in the delay control signal creation unit, the delay time of the delay control signal is variably set in accordance with a value of the resistor.